STATEMENT OF HANK KRAKOWSKI, CHIEF OPERATING OFFICER, AIR TRAFFIC ORGANIZATION, FEDERAL AVIATION ADMINISTRATION, BEFORE THE HOUSE OF REPRESENTATIVES COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE, SUBCOMMITTEE ON AVIATION, HEARING ON AIR TRAFFIC CONTROL FACILITY STAFFING. JUNE 11, 2008.

Chairman Costello, Congressman Petri, Members of the Subcommittee:

Thank you for inviting me here to testify today on air traffic controller staffing issues. The Federal Aviation Administration (FAA) is its workforce, and we consider these issues to be of the utmost importance to maintaining the safest aviation system in the world. In my testimony today, I would like to give you both an historical, as well as current, overview of the national airspace system (NAS) and the staffing issues facing us today. As part of that, I would also like to discuss some of our efforts to recruit, retain, and train controllers, and note some of our other safety initiatives to ensure that our air traffic system remains as safe as possible for the traveling public.

Historical Overview

Let me first begin by taking you back to 1981, when President Reagan fired over 10,000 members of the Professional Air Traffic Control Organization (PATCO) for an illegal strike. In the wake of that event, our controller workforce was reduced to less than 4,700. The FAA began a large-scale recruitment and selection process to rebuild the controller workforce. By 1992, when our controller workforce was once again fully staffed, almost 28,000 people had entered the FAA Academy screening program. Of that number, 16,000 individuals or 57 percent successfully completed the program, 33 percent did not pass, and 10 percent left the program for other reasons.

Of the remaining 16,000 individuals, approximately 72 percent of those assigned to Air Route Traffic Control Centers (ARTCC) achieved the Certified Professional Controller (CPC) status, while 84 percent assigned to terminal facilities achieved CPC status. Many of those not successful in the facility-training program were reassigned to less demanding

facilities and ultimately achieved CPC status, while others secured jobs elsewhere within the FAA. The remainder resigned or were dismissed from the agency.

Recruitment and Retention

Even though the controller workforce was once again fully staffed, the realities were that, because of the concentrated, post-strike period of hiring, the FAA would have to once again begin a major recruitment effort as these controllers began to age out of the system. The vast numbers of controllers hired in the 1980s were long-predicted to retire once they reached retirement eligibility after 25 years of service.

As you know, the FAA initially developed a 10-year controller workforce staffing plan in 2004. We refine this plan each year. Last year, for example, we developed staffing ranges for each facility. The long-term focus of these ranges is on the CPC, who provides the maximum scheduling flexibility for a facility. As we update and refine our ranges, we will continue to make adjustments based on facility traffic performance. In the interim, many facilities will be in a state of transition as the agency manages through the ongoing retirements and concurrently certifies newly hired controllers.

However, the ranges also take into account the fact that developmental controllers, especially those in the later stages of training, can and do staff positions for which they are fully certified. This is not a new practice. For example, Philadelphia International Airport is a Combination Radar Approach Control and Tower with Radar facility, in which controllers work in the tower cab portion and in the radar room (also known as a "TRACON"). In order to be a CPC in these types of facilities, the controllers must be "checked out" or qualified on all of the positions in both the tower and the TRACON. Thus, a developmental controller who has completed 50 percent of the required training to achieve CPC status, is fully certified to work <u>all</u> positions in the tower independently, while continuing to qualify for the radar positions.

The agency has historically used developmental controllers to meet staffing requirements. In fact, the staffing agreement between the FAA and NATCA from 1998-2003 required only a specific number of "bargaining unit employees," with no differentiation between CPCs and developmentals.

In 2007, the anticipated retirement wave began, and we project that retirements will continue to hit record numbers in 2008 and 2009. While our historical hiring goal was a "one-for-one" model (one new hire for every one retirement), beginning in 2004, we increased our hiring requests to prepare for the anticipated retirements in the next decade. Our strategic hiring plan took into account both projected retirements as well as expected attrition in new hires. From 2008-2017, we plan to hire approximately 17,000 new air traffic controllers.

To achieve these ambitious goals, the FAA has been recruiting aggressively. In addition to our more traditional vacancy announcements to recruit from the general public, retired military controllers, eligible veterans, and current and former civilian air traffic controllers, we have been using major Internet outlets such as Careerbuilder.com, Monster.com, and CraigsList, as well as the social/professional networking site, LinkedIn. We have participated in military job fairs across the country, as well as advertised in *USA Today* and *Aviation Week & Space Technology*.

In an effort to recruit more women and minorities, we have also advertised in special interest newspapers and magazines, such as *Native American Times, Asian Week, Latina*, and *Minority Careers*. The FAA has also participated in the NAACP Diversity Job Fair, the Congressional Black Caucus Diversity Job Fair, and the League of United Latin American Citizens Job Fair in FY 2007. Additionally, our joint effort with the Department of Veterans Affairs enables veterans with disabilities to take advantage of on-the-job training opportunities through FAA's new Veterans' Employment Program. This initiative allows veterans with disabilities to train for air traffic control and airway transportation systems specialist positions.

In October 2007, the FAA chose an additional nine colleges and universities to be part of the Air Traffic Collegiate Training Initiative (AT-CTI) program, which brings the number of schools currently in the program to 23. We plan to continue to offer the opportunity to other schools to apply to the program. This partnership between the FAA and the colleges and universities in the AT-CTI program will contribute to meeting air

traffic controller hiring goals in the coming years. This is a hiring source of growing significance for the controller workforce.

One of our more effective recruitment tools is the offer of a recruitment bonus of up to \$20,000 for terminal and en route new hires who have at least 52 consecutive weeks of experience within the last two years as a certified air traffic controller with control tower operator or radar certification. New hires with no experience do not qualify for a bonus and are sent to the FAA Academy in Oklahoma City for one to three months (depending on the type of facility they will staff), where they are paid a base salary of \$19,300 per year for the short time they are there. Upon successful graduation from the Academy and assignment to a facility, their starting salaries almost double to at least \$37,500 per year (including locality pay). The average controller is making about \$50,000 at the end of his/her first year.

New hires at the Academy receive additional benefits beyond their base salary. Academy tuition is funded by the FAA, and the FAA pays for travel to and from the Academy based on the student's official address. While at the Academy, FAA provides transportation between central locations throughout the city and the Academy. Controllers at the Academy are also entitled to room and board, which is reimbursed at \$79.20 per day. This covers meals, lodging and incidentals. Thus, student controllers earn \$2,376 in per diem every 30 days at the Academy. Controllers at the Academy also begin earning annual and sick leave and are eligible for other federal benefits such as health and life insurance. Those controllers who are hired under a Veterans Recruitment Appointment, or who are retired military, or current or former Federal controllers, receive a starting base salary of \$33,100, and in addition receive locality pay, tuition, travel costs, room, board, and benefits. As you might surmise, with such salaries, training opportunities, and benefit packages, we have found that we have had no problems attracting applicants.

The FAA has also streamlined and centralized the controller hiring process. Individual facilities can identify vacancies and select prospective new controllers as much as one

year in advance. Our security and medical clearance process has been improved by implementing Pre-Employment Processing Centers (PEPCs) to reduce the time it takes to complete pre-hire screenings, such as medical examinations, psychological and drug testing, and security clearance applications.

These initiatives have yielded a deep applicant pool of quality candidates. As noted above, we have discovered that with our salary and benefits packages, we have had no problems attracting qualified candidates. Since March 2008, we have had over 5,500 qualified applications available for selection and placement from our various applicant sources (former FAA controllers, veteran military controllers, CTI students, and public sector announcements). Our largest applicant source is our public sector announcements, which are published monthly. The last two such announcements combined yielded 2,500 qualified candidates.

In addition to our aggressive recruiting efforts, the FAA has been offering retention incentives to retirement-eligible controllers on a case-by-case basis. Retention bonuses are typically 25 percent of an individual's salary with a cap of \$25,000. Controllers may also be eligible for relocation and reassignment bonuses for certain key facilities. Thus far, 44 retention bonuses have been accepted, and another 26 are pending consideration.

Training

We recognize that there is a great deal of interest over the high number of developmental controllers (controllers still in training) and the high ratio of developmentals to controllers in some of our facilities. Let me first say that training is something on which the FAA places a very high priority. Our controller workforce plan is projected to keep trainee to controller ratios below 35 percent. Currently, the ratio is about 25 percent. While we currently do have a higher percentage of developmentals in our facilities than we have had in recent years, our training programs are set up to maximize quality training, both in the classroom and on-the-job, while continuing to ensure we are keeping the air traffic control system as safe as possible. In order to address this concern further, allow me to take you through the training process.

First, recruits begin training at the FAA Academy in Oklahoma City. There, they learn the fundamentals of air traffic control for their particular job path: en route, tower, or terminal radar. The FAA Academy trains developmental controllers using classroom lectures, computer based-instruction, and simulation systems. The Academy lays the foundation for developmental controllers by teaching fundamental air traffic control procedures that are used across the country. When developmental controllers graduate from the Academy, they are prepared to adapt to their assigned facility and successfully complete the training required to reach CPC status.

Upon successful completion of their Academy training, developmental controllers then report to their assigned field facility to continue with their on-the-job training. Facility training begins with developmental controllers learning facility-specific rules and procedures. A developmental then will begin on-the-job training on an operational position. This training is conducted by a CPC who observes and instructs a developmental controller as they work the control position.

During their on-the-job training, developmentals are assigned to different positions within their facility. Once they have mastered those positions, they are then certified for those positions. I want to emphasize that no developmental may control live traffic independently until he or she has been certified to work that traffic position. Each control position has a minimum and maximum number of on-the-job training hours allotted. Based upon the recommendation of the training team, a developmental can be certified by the supervisor on a control position anywhere between the minimum and maximum number of hours. The final result at the end of training is achieving certification on all positions, or CPC for that facility. If a developmental controller fails to certify, they can be removed from service, or reassigned to a less complex facility in accordance with agency procedures. The on-the-job training process is designed to provide developmental controllers sufficient seasoning time and opportunity to develop their skills as they progress towards becoming CPCs.

The FAA has been leveraging the use of more advanced technologies to improve training while reducing the time needed to fully train our controllers. Our latest data indicates that where it used to take three to five years to train an air traffic controller, controllers can now be trained in one to three years, depending on the complexity of the facility they staff. The most recent data shows that average training time to achieve CPC status is 1.4 years for terminal controllers, and 2.6 years for en route controllers. We have achieved this reduction, not by cutting training time or quality, but by improving the training and scheduling processes, and by the increased use of training technologies such as simulators.

With simulators, training no longer depends on the density or complexity of actual air traffic operations. Simulating the real-time traffic environment provides a uniform training format for trainees to develop the necessary skills and experience that would take much longer solely through on the job training. Through the use of simulation systems students will benefit from consistent delivery of simulated traffic, weather, and unusual situations.

The simulation system provides significant improvements to existing training operations. It eliminates the need for preemptive intervention on the part of an instructor to avoid a possible hazardous situation, allowing the student to "work through" the scenario until they can consistently generate a successful outcome. The simulator system does not interact with actual air traffic control operational systems and poses no threat to service. It realistically replicates operations that enable training in an absolutely safe environment. In addition to initial training, the simulator system provides for refresher training to heighten awareness of controllers by generating seldom seen operations and airport conditions. Controllers who have recently been assigned to a new facility can also use the system to train in their new operational environment, reducing their training time.

We have also asked retired FAA air traffic controllers to return as contractors to train the new workforce. More than 100 retired controllers became contract training instructors in FY 2007. They joined an existing 200 contract instructors from previous years. This

allowed the FAA to retain their valuable expertise and train the next generation of controllers. These experts focus solely on training the next generation of controllers, rather than moving back and forth between working traffic and on-the-job training.

The Office of the Inspector General has made recommendations to us about improving our training processes, including centralizing oversight of our training programs at headquarters. To that end, we recently created and filled a new senior position in the Air Traffic Organization that is responsible for training, both controllers and technicians. Our goal is to focus and enhance the high priority we place on training, and to centralize our training policies to ensure accountability and oversight.

Facilities Staffing

The FAA has learned many lessons over the years following the PATCO strike. Among these lessons are that we recognize that we have a committed and dedicated controller workforce. Immediately following the PATCO strike, more than half of our controllers were trainees. Our controller workforce plan avoids such future disparities. As mentioned above, the plan projects an average trainee to controller ratio below 35 percent, while the current average is about 25 percent. And, while we have a higher percentage of developmentals (≥35 percent) in some of our facilities now, that will decline as trainees gain their certifications. We aim to staff every facility according to its current and future needs. Each facility is unique and each facility requires its own unique staffing solution.

The FAA staffs facilities to the traffic volume and controller workload. And, since traffic volume is dynamic, so are staffing needs at any given facility. Our "staff to traffic" model exercises the flexibility to match the number of controllers at various facilities with traffic volume and workload. Staffing to traffic requires the FAA to consider many facility-specific factors. They include traffic volumes based on FAA forecasts and hours of operation, as well as individualized forecasts of controller retirements and other attrition losses. Proper staffing levels also depend on the efficient scheduling of employees, so the FAA tracks a number of indicators as the agency reviews staffing

levels. Some of these indicators are overtime, time on position, leave usage, and the number of trainees. In addition, staffing at each location can be affected by unique facility requirements such as temporary airport runway construction, seasonal activity and the number of controllers currently in training. Staffing numbers will vary as the requirements of the location dictate.

The State of the System

I would like to turn now to an overview of what is happening in the NAS; the state of the system is the major determinant in our staffing needs. Currently, we are seeing a downturn in air traffic in most of the country. Due to the rising cost of fuel and other financial pressures, airlines are being forced to make changes. Major carriers have announced substantial reductions in their flight schedules and five airlines have gone bankrupt. These events have resulted in a reduction of over 42,000 operations from the air traffic control system. General aviation operations are also down, due to fuel and insurance costs, further de-stressing the system. With a few notable exceptions -- JFK, Denver and San Francisco, for example -- air traffic is down approximately 2% nationally year over year.

In most cases, this downturn in traffic has translated into fewer operations that a given controller needs to oversee. In 2000, the average annual number of operations per controller was 10,028. For the 12 month period ending April 2008, the average number of operations per controller is 9,260. "Time on position," the time that a controller actually spends controlling traffic, is averaging 4:45 hours per eight hour shift. And, average overtime for the past 12 months is 2.2 percent; in 2001, average overtime was 1.5 percent. We do recognize that there are some facilities with greater staffing needs, and we are adjusting our planning to address these facilities.

While the short-term pressure is easing, we still forecast long-term growth. Thus, we increased our controller workforce by a net gain of 256 in FY 2007, and we are on target to increase it an additional 256, to an end of year target of 15,130 for FY 2008. The President's budget for FY 2009 calls for a further net increase of over 300 controllers.

Given the current airline reductions and current staffing statistics, we believe our staffing goals and plans are on target.

Other Initiatives

In addition to our recruitment, training, and retention efforts, as well as our management of staffing at our facilities, we are moving forward with other initiatives that we believe will improve safety and better engage our workforce.

The first of these is the Air Traffic Safety Action Program (ATSAP), a joint pilot program between the FAA and the National Air Traffic Controllers Association (NATCA), in which controllers can voluntarily self-report safety hazards and incidents to the agency for review and risk assessment, without fear of retribution. ATSAP comes after several years of negotiation and is a logical extension of the FAA's aviation safety action program in which air carriers voluntarily participate. The pilot program is scheduled to last 18 months, during which time either side may terminate the agreement. It will be implemented at several targeted facilities.

Another major FAA initiative is scheduled for next week. We will conduct our first Annual Symposium on Fatigue in Aviation from June 17-19, 2008. The symposium will offer the United States and world aviation communities the opportunity to focus on fatigue, its management, and risks. The agenda will offer content from 21 expert presenters from around the world and will be moderated by industry leaders, labor, and medical experts.

There will be three flight operations working groups that will be led by a panel of three management, union, science or government representatives, and facilitated by fatigue science experts. These groups will consist of pilots and flight attendants and will break down into one "long-haul operations" group and two "domestic operations." The long haul group will consist of representatives from major and cargo airlines. Both domestic groups (one with a transcontinental focus; the other with multi-leg/short haul focus) will represent pilots and flight attendants from major and regional airlines. These three

groups will also include a variety of participants including those from labor unions, the scientific community, the international aviation community, the National Transportation Safety Board, and other federal agencies. We will also be having "shift work" groups which will all be jointly comprised of participants from air traffic control, maintenance, ramp operations, dispatch, and technical operations. Each of these will be led by a panel of three industry or union decision makers. Leadership structure and identity, as well as meeting processes for all, are in final development.

Our goal for these workgroups centers on the understanding that the fatigue issue demands a balanced, collaborative and earnest effort to reduce fatigue risk in aviation. The symposium builds upon the potential for industry and government (both labor and management), and science to propose fatigue mitigation strategies that could develop into industry-wide policy, non-prescriptive approaches, regulatory initiatives, potential propagation of best practices, and other initiatives that may originate from the symposium workgroups.

Conclusion

I hope that my statement has helped illuminate the FAA's plans and goals for our controller workforce. As I said at the beginning, the FAA is its workforce, and we are proud to have one with dedicated individuals who are committed to our mission: to ensure the safety and efficiency of our aviation system.

Chairman Costello, Congressman Petri, Members of the Subcommittee, this concludes my prepared remarks, and I look forward to answering any of your questions.